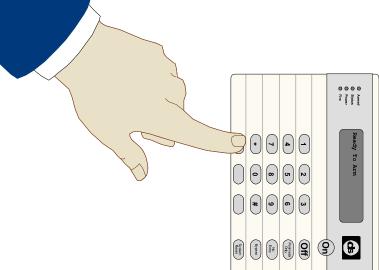


An instruction guide For your alarm system when used with a DS7447, DS7443S or DS7445 keypad





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### System Overview

mind. Welcome to the DS7080i Version 2+ intrusion/fire control system. Since each installation is unique, your's will contain Congratulations on the installation of your new security system. No other investment can provide such peace of some, but not necessarily all of the features mentioned in this guide.

## A security system usually consists of:

- alarm signals from detectors, the sounding of bells and/or sirens, and communicating with your alarm monitoring company. A Control Panel: The control panel is the center of your intrusion/fire alarm system. It supports such vital functions as receiving trouble and
- Command Control Stations (Keypads): The keypad is where you interact with the system. The keypad displays critical information concerning the operation of your alarm system, plus it allows you to initiate commands such as arming and disarming
- Protected Zones: Your security system may contain protected windows and doors (perimeter zones), plus various internal sensors. Your control panel separates perimeter zones from interior protection zones. Specific protection devices may include:
- glass breakage sensors: Devices that detect the sound of breaking glass.
- interior motion sensors: Electronic sensors (e.g. passive infrared) that detect movement within an interior zone.
- magnetic contacts: Switches used to detect the opening of doors or windows.
- smoke detectors: Devices that detect products of combustion.



minutes while the panel makes additional communication attempts. station. In the unlikely event that the central station is not able to receive the report, your phone may be unavailable for up to 20 station to report system events. You will not be able to use your phone while the system is communicating with the central monitoring This system includes a telephone line seizure feature. The system may be programmed to communicate with a central monitoring

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Your system may or may not be monitored by an alarm monitoring service. If it is not monitored, it is vital to understand the following:

• Alarms sound only at your location.

- When an alarm is sounded, no signals are sent out.
- Duress and other silent alarms are disabled.
- Emergency alarms sound only at your location.

# Understanding the DS7447, DS7443S and DS7445 Keypads

## This chart will help you understand what each Light/LED represents.

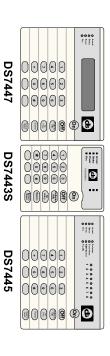
The DS7447 is an alphanumeric LCD keypad.

The DS7443S is an LED keypad; its LEDs 1-6 represent the first 6 zones of the system.

The DS7445 is an LED keypad; its LEDs 1-8 represent the 8 zones of the system.

Both display information on various control panel functions.

A built-in sounder is used to annunciate keystroke entries and as an interior warning device.



Light	HO	Flashing	On
Armed (red)	The control panel is disarmed.	<ol> <li>Alternating On/Off. Exit delay is in progress or an alarm has occurred.</li> </ol>	The control panel is armed, (in a partitioned system, both
		2- Blinks Off once every 2 seconds. Partition 1 is armed and Partition 2 is not armed.	alarms have occurred.
		3- Blinks Off twice every 2 seconds. Partition 2 is armed and Partition 1 is not armed.	
Status (green)	One or more zones are not ready to arm.	One or more zones are bypassed.	All zones are ready to arm.
<b>Power</b> (green)	The control panel has lost power. There is no AC or battery.	Control panel problems exist. See <i>Error Displays</i> on p. 25.	The control panel is in normal operation. It is running on AC power with no problems.
Fire (red)	There are no fire alarms.	A fire zone is in alarm.	A fire trouble condition exists.

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# Understanding the DS7447, DS7443S and DS7445 Keypads (continued)

# Lights Present only on the DS7443S and the DS7445 Keypads

Light	Off	Flashing	
Perimeter (yellow)	The perimeter is not armed.	This Light will not flash.	The perimeter is armed.
Supervisory (yellow)	This Light is not used by the DS7080i V2+.	Not used.	Not used.
Bell Silenced (yellow)	The bells do not need to be or have been silenced.	This Light will not flash.	There has been a Fire alarm and the bells have been silenced. To clear, enter the Fire Reset command.
Trouble (yellow)	There are no trouble conditions.	This Light will not flash.	A trouble condition exists.
LEDs 1-6 DS7443S (red)	There are no zone alarms.	A zone (1-8) has been alarmed. (Zones 7 and 8 are not displayed)	A zone (1-8) is Not Ready to Arm or if a fire zone, a trouble condition exists. (Zones 7 and 8 are not displayed)
LEDs 1-8 DS7445 (red)	There are no zone alarms.	A zone (1-8) has been alarmed.	A zone (1-8) is Not Ready to Arm or if a fire zone, a trouble condition exists.

## Understanding Partitioning

## Your alarm system may be Partitioned.

A Partitioned system is a system that is divided into two areas which may be armed and disarmed independently

The following applies in a Partitioned system:

- User PIN numbers are always required to perform operations in a Partitioned system.
- DS7447 LCD keypads will alternately display (about every 2 seconds) the current status of each partition.
- DS7443S and DS7445 LED keypads will alternately display (about every 2 seconds) the current status of each partition by way of the LED's. See "Understanding the DS7447, DS7443S and DS7445 Keypads" on pages 4 and 5 for details.
- Partition in which the User has authority. If the User PIN has authority in only one Partition, using that PIN on any keypad will perform Arming and Disarming commands only for the
- If the User PIN has authority in both Partitions, the User may arm or disarm both Partitions by entering the commands from any keypad.
- Only Users with access to both partitions can arm common zones.
- If the User PIN has authority in both Partitions, the User may arm or disarm the first Partition only by entering the PIN number + [##] + the arming/disarming command. To perform arming or disarming commands in the second Partition only, enter the PIN number + [###] + the arming/disarming command.
- If Custom Arming (PIN + [#] [4]) is used in a Partitioned system, the following will apply:
- Users with access to both partitions can Custom Arm all zones.
- Users with access to both partitions cannot custom arm a single partition.
- Users with access to Partition 1 can Custom Arm any zones in Partition 1 but cannot arm common zones or zones in Partition 2.
- Users with access to Partition 2 can Custom Arm any zones in Partition 2 but cannot arm common zones or zones in Partition 1.

## Turning ON (arming) your System

This chart explains the five normal ways to arm the system.

The green Status Light must be on steady and the display\* must read "Ready to Arm" in order to arm the system with one of these commands. If the green Status Light is not on, or if the display\* is reading **Not Ready**, "then see Force Arming or Zone Bypass for other ways to arm the

If this is a Partitioned system, please read "Understanding Partitioning" on page 6 of this guide before using this chart.

Move freely around the interior.	expires.  A single beep will sound. The red Armed Light will begin to flash. "Perimeter Inst." will be displayed.* "Exit Now" will be displayed during the exit delay interval.* The red Armed Light will turn on steady after the exit delay expires. The yellow Perimeter Light will turn on steady after the exit delay expires.** Only exterior protection zones will be armed.	PIN + [No Entry] + [Perimeter Only]	Perimeter Instant Arming Someone still on the premises. There is NO entry delay in effect.
થા. કોલ√	<ul> <li>A single beep will sound.</li> <li>The red Armed Light will begin to flash.</li> <li>The green Status Light will turn off.</li> <li>"Armed" will be displayed.*</li> <li>"Exit Now" will be displayed during the exit delay interval.*</li> <li>The red Armed Light will turn on steady after the exit delay</li> </ul>	PIN + [On]	Normal Arming  No one left on the premises.  An entry/exit delay
₹	* = DS7447 only What will Happen ** = DS7443S & DS7445 only	Command Sequence***	Type of Arming Desired

\*\*\* = If in "Residential Mode", a PIN is not required for these commands.

NOTE: In commercial burglar alarm applications for UL Listed Requirement systems, a ring-back indication and bell test should be heard after arming (closing). If not heard, call for service.

## Turning ON (arming) your System (continued)

If this is a Partitioned system, please read "Understanding Partitioning" on page 6 of this guide before using this chart.

Maximum Security Arming  No one left on the premises.  There is NO entry delay in effect. An alarm WILL occur upon entry.	Custom Arming (If programmed) Ask your installing company to explain the type of arming that occurs when using this command.	Perimeter Arming Someone still on the premises. The entry/exit delay is in effect.	Type of Arming Desired Sec
PIN + [No Entry] + [On]	PIN + [#] + [4]	PIN + [Perimeter Only]	Command Sequence***
<ul> <li>A single beep will sound.</li> <li>The red Armed Light will begin to flash.</li> <li>The green Status Light will turn off.</li> <li>"Armed Instant" will be displayed.*</li> <li>"Exit Now" will be displayed during the exit delay interval.*</li> <li>The red Armed Light will turn on steady after the exit delay expires.</li> </ul>	<ul> <li>A single beep will sound.</li> <li>The red Armed Light will begin to flash.</li> <li>"On Partial" will be displayed.*</li> <li>"Exit Now" will be displayed during the exit delay interval.*</li> <li>The red Armed Light will turn on steady after the exit delay expires.</li> <li>Some zones will be bypassed.</li> </ul>	<ul> <li>A single beep will sound.</li> <li>The red Armed Light will begin to flash.</li> <li>"Perimeter On" will be displayed.*</li> <li>"Exit Now" will be displayed during the exit delay interval.*</li> <li>The red Armed Light will turn on steady after the exit delay expires.</li> <li>The yellow Perimeter Light will turn on steady after the exit delay expires.**</li> <li>Only exterior protection zones will be armed.</li> </ul>	* = DS7447 only * = DS7443S & DS7445 only
Exit during the exit delay interval. CAUTION: Violating any zone after the exit delay will cause an instant alarm.	Exit during the exit delay interval.	Move freely around the interior.	What to Do

\*\*\* = If in "Residential Mode", a PIN is not required for these commands.

**NOTE:** In commercial burglar alarm applications for UL Listed Requirement systems, a ring-back indication and bell test should be heard after arming (closing). If not heard, call for service.

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## **Quick Arming Your System**

# This chart explains four ways to quick arm the system from the keypads.

If Quick Arming is not used, a PIN must be entered at the beginning of all arming command sequences.

Quick Arming is not available in a partitioned system.

When Quick Arming is used, the following shortcuts are available:

Quick Arming Command Sequence	Type of Arming
[#] + [On]	Normal Arming
[#] + [No Entry] + [Perimeter Only]	Perimeter Arming - no entry delay
[#] + [Perimeter Only]	Perimeter Arming - entry/exit delay
[#] + [No Entry] + [On]	Maximum Security Arming

# Turning OFF (disarming) your System / Silencing Alarms

# This chart explains proper procedures for disarming and/or silencing alarms.

Please read the section about Emergency Procedures prior to being confronted with an emergency event.

chart below. If you have entered the building through a perimeter door, you may hear a steady pre-alert tone from the keypads. If so, disarm according to the



displayed) or the DS7445 zone LEDs (1-8) will be flashing for the corresponding zone that is in alarm. If the bells and sirens are on and/or the red Armed Light is flashing, then the keypad is signaling that an alarm has occurred sometime before your arrival. The DS7447 will display "Zone Alarm". The DS7443S zone LEDs (1-6) (Zones 7 & 8 will not be

• The keypad will also issue a pulsed tone during the entry delay instead of the usual steady tone.

Emergency Services' personnel. • If the alarm has not been previously investigated, do not enter the building unless accompanied by the appropriate

Action Desired	Command Sequence	What will Happen *
Disarming the System	PIN + [Off]	The red Armed Light will turn off. Pre-alert sounders will silence.
Silencing Alarms	PIN + [Off]	The red Armed Light will turn off. Zone LEDs (1-6) on the DS7443S will turn off. (Zones 7 & 8 are not displayed) Zone LEDs (1-8) on the DS7445 will turn off. Alarms in progress will silence.

In non-partitioned systems. For systems with partitioning, review "Understanding the Keypads" on page 4 and "Understanding Partitioning" on page 6.

## Force Arming your System

## This chart explains the procedure for Force Arming your system if one or more zones are faulted.

When one or more zones are faulted, the system may be Force Armed (if programmed) by bypassing the faulted zones. The green Status Light will be off on all keypads when Force Arming is required to arm the system. The DS7447 display will read "Not Ready" and the DS7443S and DS7445's zone LEDs will be on (the DS7443S cannot display zones 7 & 8) if one of those zones is faulted. In a partitioned system, only users with authority to the faulted zone may perform the Force Arming of that Partition.

Force Arming during an AC power failure: Regular arming of the control panel is not permitted during an AC power failure. Having to Force Arm serves as a warning that the control panel is operating under backup battery.



Bypassing or Force Arming removes some of your building's protection because it excludes the faulted zones from arming. Therefore, an intrusion may not be detected or the detection may be delayed. Always attempt to correct any zone problems (close doors and windows etc.) before using these features. If the problem can not be corrected, contact your installing company.

**NOTE:** See **Zone Bypass** for an alternate method of arming the system when faults exist. Force arming is not available in UL Listed systems.

Type of Arming	What will Happen	What to Do	What will Happen	What to Do
Force Arming Enter any arming sequence.	<ul> <li>A five second beep occurs, indicating the control panel has faulted zones and needs to be Force Armed.</li> </ul>	Press [Bypass] during the 5 second beep.	<ul> <li>The red Armed Light will flash during the exit delay interval.</li> <li>The control panel will arm with the faulted zones bypassed, or a three-beep error tone occurs indicating Force Arming has not been accepted or allowed.</li> </ul>	Exit during the exit delay interval if leaving.

**NOTE:** If in "Residential Mode", a PIN is not required for Force Arming.

### Zone Bypass

# This chart explains the procedure for bypassing a faulted zone prior to arming the system.

There may be occasions when it is desirable or necessary to temporarily bypass one or more zones prior to arming the system. Bypass commands only work when the control panel is disarmed. For instance, an open window may cause the DS7447 display to read "**Not Ready**" followed by the zone number. The DS7443S and DS7445 may have one of its zone LEDs on steady (the DS7443S cannot display zones 7 & 8). Only one zone may be bypassed each time the command is used.

If more than one zone requires bypassing, repeat the command for each zone to be bypassed.

## NOTE: See Force Arming for another method of zone bypassing.

Type of Bypassing Desired	Command Sequence**	What will Happen	What to Do
Bypass Faulted Zones	PIN + [Bypass] [X] (zone number)	The Status Light will begin to flash if no other zones are violated.	Arm control panel, if desired, with entered zone(s) bypassed.
Read Bypassed Zones	PIN + [Bypass]	"Bypass" will be displayed on the DS7447 followed by the zone number of any bypassed zones. The DS7443S and DS7445 will flash the zone LED of any zone being bypassed (the DS7443S cannot display zones 7 & 8).	
Clear Individual Bypassed Zone(s)	PIN + [Bypass] [X] (zone number)	Individual zone bypasses will be cleared.	
Clear All Bypasses	PIN + [Bypass] [*]	All bypasses will be cleared.	

<sup>\*\* =</sup> If in "Residential Mode", a PIN is not required for these commands.

#### Chime Mode

# This chart explains the procedure for turning ON and turning OFF Chime Mode.

Chime Mode causes all the keypad sounders to beep each time a Perimeter or Entry/Exit zone is violated while the control panel is off (disarmed). The [#] [7] command is used to both turn Chime Mode off and on.

You cannot set the Chime mode by partition.

Turn ON Chime Mode PIN + [#] [7]
Turn OFF   PIN + [#] [7]

<sup>\* =</sup> If in "Residential Mode", a PIN is not required for these commands.

### **Access Control**

# This chart explains the procedure for activating devices that require an Access Control PIN.

Your system may or may not use a keypad key sequence to activate other electrical devices.

The special PIN required to perform this function is known as an Access Control PIN.

This feature can be used in armed or disarmed modes.

The PIN may control devices that activate for a short period of time (e.g. electric locking mechanisms on a door).

Momentary Access
Control Panel
Activation [Access Control PIN] + [Off] The Access device will be activated for 10 seconds.

This feature must be disabled on U.L. Listed Requirement installation. The control panel is not a listed control unit (UL294).

### Changing the Date

This chart will guide you through the steps necessary to Change the Date displayed at the keypads.

You should write down your entries before you enter the Master Code Programming Mode

and have them with you as you begin programming. Make your entries promptly.

If a long delay occurs in your entries, the 3-beep error tone sounds and exits you from the programming mode.

It is recommended that this procedure be performed at a DS7447 keypad. No visual cues will be given from the DS7443S or DS7445 keypads.

Steps to Change the Date	Command Sequence	If Accepted, DS7447 Display Reads
# 1. Enter the Master Code Programming Mode.	[Master Code] + [#] [0]	"2 Change Date" (display will scroll to this)
#2. Enter a 2.	[2]	"Enter Month" (0112)
#3. Enter the Month.	[0] [1] through [1] [2] January December	"Enter Day." (0131)
# 4. Enter the Day.	[0] [1] through [3] [1]	"Enter Year." (XX) End with #
#5. Enter the Year.	The last two digits of the year, followed by the [#] key.	"Month, Day, Year" A long beep signifies acceptance.

NOTE: Entering the command sequence [Master Code] [#] [0] [2] [#] will cause the DS7447 keypad to read back the date.

### Changing the Time

This chart will guide you through the steps necessary to change the Time displayed at the keypads. You should write down your entries before you enter the Master Code Programming Mode and have them with you as you begin programming. Make your entries promptly. If a long delay occurs in your entries, the 3-beep error tone sounds and exits you from the programming mode.

It is recommended that this procedure be performed at a DS7447 keypad. No visual cues will be given from the DS7443S or DS7445 keypads.

Steps to Change the Time	Command Sequence	If Accepted, DS7447 Display Reads
# 1. Enter the Master Code Programming Mode.	[Master Code] + [#] [0]	"6 Change Time" (display will scroll to this)
#2. Enter a 6.	[6]	"Enter Day" (17)
#3. Enter the Day.	[1] through [7] Sunday Saturday	"Enter Time." (01001259)
# 4. Enter the Time. (Hour and minute)	[0] [1] [0] [0] through [1] [2] [5] [9]	"Enter AM/PM." (4/6) End with #
#5. Enter AM or PM.	[4] [#] or [6] [#] (4=AM, 6=PM)	"Day - Time" A long beep signifies acceptance.

**NOTE:** Entering the command sequence [Master Code] [#] [0] [6] [#] will cause the DS7447 keypad to read back the time.

### **Automatic Arming**

Each partition can be programmed to automatically arm once per day. To program the Automatic Arming time, perform the following:

Setting the Automatic Arming Time	Notes
Enter a Master PIN + [#] + [0]	Setting the Automatic Arming Time can only be performed with a Master PIN Code.
Enter a [1] to enter the Automatic Arm Setup programming	
Enter the partition number.	The program will prompt you to enter partition 1 or 2 if the system is partitioned and if the user has access to both partitions. If the system is not partitioned or if the user has access to only one partition, this selection will not appear.
Press [#] to exit.	In a non-partitioned system, the display will automatically go to Sunday.  The user will only be allowed to program the partitions to which they are assigned.
Enter a time for each day. Enter in [0] [1] [0] [0] [#] format.	The display will start with Sunday. It will read, "Sunday - nn : nn"  Enter the time in 24 hour format. You may move the cursor left or right by pressing the "A" (Fire) or "C" (Panic) keys. When you have completed the time entry press the [#] key. The display will then advance to the next day. You may exit the Set Auto Arm Time Mode at any time by pressing the * key once. The system will also exit the Auto Arm Time mode after the time is programmed for Saturday.  Samples of times: 12 noon = 1200#   12 midnight = 2400#   12:01pm = 1300#   1:00pm
	12:01am = 0001# 1:00am = 0100# Disabled = 0000#

## **Delaying Automatic Arming**

## This section explains how to delay the Automatic Arming Time.

every minute. During the last five minutes before arming, these sounders will be on steady. If programmed by the installing company, the keypad sounders, and any outputs programmed to follow the keypad sounders, will pulse five times To inform occupants that the system is about to arm, a pre-arming period will begin 15 minutes before the system arms automatically.

Once per minute the keypad will read, "Arm in nn min./PIN + OFF - extend."

Delayed Automatic arming will affect only the partitions you have access to.

To extend the Automatic Arming of the system during the automatic arming pre-arming period, perform the following steps:

The arming time will be extended 30 minutes. A new pre-arming period will begin 15 minutes prior to the new automatic arming time.	Press [OFF]
	Enter a PIN
What will Happen	Extending Automatic Arming *

<sup>\*</sup> = To extend the Automatic Arming at any time, use the Delayed Arming feature on page 19.

**NOTE**: The keypad volume setting also applies to the Auto Arm tone.

## **Setting Delayed Arming**

This section explains how to cause the system to arm after a specified number of hours.

Delayed arming is simply causing the system to arm after a specified number of hours. To program the system for delayed arming, perform the following steps:

are required, you may press [*] to exit. For example: If if is 3:30 now, and you would like the system to arm at 9:30, enter 06.	Arm in nn Hours # to accept
Enter the number of hours (up to 23) from now that you would like the system to arm. If no changes	The keypad will display the following:
	Enter [#] [9] [9] to enter the Delayed Arming programming
	Enter a PIN
Notes	Delaying Arming

Additional Notes: Delayed arming can be used even if there are no automatic arming times programmed.

one provided with automatic arming. Delayed arming will override automatic arming. Delayed arming will also provide a 15 minute pre-arm period like the Setting Delayed Arming will affect only the partitions you have access to. Users with PIN levels of 0-2 will be able to set Delayed arming.

Pressing the [\*] key will exit the display without changing the arming time. You may view the time left (rounded to the nearest hour) to the arming time by entering PIN [#] [9] [9]. The display will show "Arm In \_\_ Hours".

## **Emergency Procedures**

### **Identifying Alarm Sounds**

Your alarm system may be programmed for a steady alarm sound or a pulsed alarm sound. It is important to learn the difference between a fire alarm sound and an intrusion alarm sound before you are confronted with an actual emergency.

#### Silencing Alarms

All alarms can be silenced with any PIN that has disarm privileges. Entering your PIN + [Off] will silence the alarm and turn off (disarm) the control.

#### A Cautionary Note

How you respond to an alarm will depend, mostly, on the type and time of the alarm. You should seek the advice of your installing company as they install your system, **not** later (e.g. after an alarm) to develop a response plan.

## Above all else, common sense should prevail.

If there is any threat or hint of danger to yourself or others on the premises, such as in the event of a fire alarm, everyone should be instructed to leave the premises immediately. Do not enter the premises unless accompanied by the appropriate Emergency Services' personnel, or after they have given the OK to enter.

### **Caution When Entering A Building**

If the bells and sirens are on and/or the red Armed Light is flashing with the DS7447 display reading "**Zone Alarm**" or the DS7445 having its zone LEDs 1-8 flashing, then the keypad is signaling that an alarm has occurred. The keypad will also issue a pulsed tone during the entry delay instead of the usual steady tone.

If the alarm has not been previously investigated, do not enter the building unless accompanied by the appropriate Emergency Services' personnel.

#### Fire Alarms

Fire Alarms are silenced using the same procedure as intrusion alarms: a PIN (with disarm privileges) + the [Off] key.

The Fire Alarm system is **not** reset until alarms at smoke detectors are cleared by using the [System Reset] command. The Fire Alarm system will **not** be functional until this procedure has been followed. See *Fire Reset* on page 23.

# Turning OFF (disarming) your System under Duress

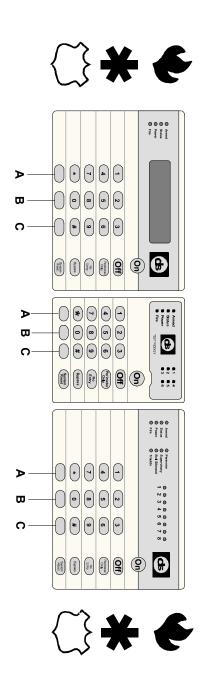
## This chart explains the proper procedure for disarming under Duress.

Ask your installer if the Duress feature has been activated

A Duress code is used when someone demands, by threatening your life or well-being, that the system be turned off. When used, the code will both turn off the system and report a silent Duress alarm if connected to a monitoring service. Extreme care should be used when entering your PIN to turn off the system, so a Duress code is not inadvertently entered. The Duress code will only disarm partitions that it has been assigned

The system will appear to disarm normally. A Duress report will be sent to your monitoring service.	[Duress Code] + [Off]	Disarming the System with the Duress code
What will Happen	Command Sequence	Type of Disarming

# **Emergency Keypad Alarms / Silencing Alarms**



installing company to explain the function of these keys. The Emergency Alarm Keys [A], [B], and [C] may generate Fire, Special Emergency, and Panic Alarms if programmed by the installer. Ask your

When using the Emergency Alarm Keys, they must be pressed for two seconds to generate an alarm

**Note:** If the Emergency Alarm Keys are to be used, they should be labeled to signify their functions.

The A key should be labeled as the Fire key. This is the only key that may be designated as the Fire key.

The B key should be labeled as the Special Emergency key. The C key should be labeled as the Panic key.

Use the Disarming Command Sequence to cancel or silence these alarms.

### **Fire Reset / Fire Trouble**

#### Fire Reset

During a fire alarm, exit the premises immediately. When you have determined there is no fire, it is recommended that you silence the bells/ sirens before you initiate the [System Reset] command.



Before the [System Reset] command is used, determine which smoke detector has alarmed so the installing company may verify its operation.

A PIN followed by the [System Reset] key will reset any smoke detectors after a fire alarm has occurred.

### PIN + [System Reset]

**NOTE**: To use the System Reset command sequence, your PIN must have disarm privileges.

The System Reset command will perform a fire reset, will perform a battery test, and will clear all system troubles.

#### Fire Trouble

A Fire Trouble display signifies a problem with the fire system, such as a break in the wiring that monitors smoke detectors.

A Fire Trouble will be indicated by a short beep from the keypad sounders every 10 seconds. The DS7447 keypad will display "Fire Trouble" followed by the zones in a trouble condition.

The DS7443S and DS7445 keypads will turn the Fire and Trouble Lights on steady and will light the corresponding zone LEDs.

Notify your installing company immediately if the Fire Trouble message is displayed.

The Fire Trouble beep can be silenced with any PIN followed by the [Off] key. After problems have been remedied, a PIN followed by [System Reset] should be entered to clear the "Fire Trouble" display.

#### Fire Safety



WARNING

# No fire detection system should be considered 100 percent foolproof



This fire alarm system can provide early warning of a developing fire. Such a system, however, does not ensure protection against property damage or loss of life resulting from a fire. Any fire alarm system may fail to warn for any number of reasons (e.g. smoke not reaching a detector that is behind a closed door).

When considering detectors for residential applications, refer to NFPA Standard 72, "The National Fire Alarm Code." This standard is available at a nominal cost from: The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

### If Installed in Family Residences

Adherence to the NFPA Standard 72 can lead to reasonable fire safety when the following items are practiced:

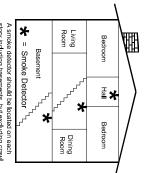
- Minimize hazards: Avoid the three traditional fire killers: smoking in bed, leaving children home alone, and cleaning with flammable liquids.
- Providing a fire warning system: Most fire deaths occur in the home, the majority, during sleeping hours. The minimum level of protection requires smoke detectors to be installed outside of each separate sleeping area and on each additional story of the dwelling.

For added early warning protection, it is recommended that detectors be installed in all separated areas including the basement, bedrooms, dining room, utility room, furnace room, and hallways.

## Having and Practicing an Escape Plan

A fire warning may be wasted unless the family has planned in advance for a rapid and safe exit from the building.

 Draw a floor plan of the entire house showing two exits from each bedroom and two from the house. Since stairwells and hallways may be blocked during a fire, the plan should provide exits from bedroom windows.



A smoke detector should be located on each story including basements, but excluding crawl spaces and unfinished attics.

Make copies of the plan and practice it with all family members

Prearrange a meeting place outside and away from the residence.
 Once out of the building, all occupants should immediately go to the pre-selected location to be accounted for.

continued on next page

### Fire Safety (continued)

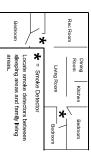
- Provide a barricade between family members and fire, smoke, and toxic gases (e.g. close all bedroom doors before retiring).
- Children should be instructed on opening their bedroom windows and exiting safely from the building. If exiting is not possible, they should be taught to stay at the open window and shout for help until it arrives.
- In the event of a fire alarm after retiring, wake the children by shouting to them from behind your closed door. Tell them to keep their bedroom doors closed.
- If the top of your bedroom door is uncomfortably hot, do not open it. There is most likely fire, intolerable heat, or smoke on the other side. Shout to all family members to keep their bedroom doors closed and to exit the building via alternate routes.
- If the top of the door is not uncomfortably hot, brace the bottom of the door with your foot, and the top with one hand, then open the door about one inch. Be prepared to slam the door shut if there is any pressure against the door or if any hot air rushes in.
- If there is no evidence of excessive heat or pressure, leave the room and close the door behind you. Shout appropriate instructions to all family members and immediately leave the building via the pre-planned routes. If heavy smoke is present, drop to your hands and knees, or crawl to remain below the smoke level.

### Installation Considerations

Proper location of detection devices is one of the most critical factors in a fire alarm system.

The following are some general considerations:

Smoke detectors should **not** be installed in "dead air" spaces or close to ventilating or air conditioning outlets because smoke may be circulated away from the detector. Locations near air inlets should be favored.



- Avoid areas subject to normal smoke concentrations such as kitchens, garages, or near fireplaces.
- Do not install smoke detectors where normal area temperatures are above 100 degrees F (38 degrees C) or below 32 degrees F (0 degrees C).
- Areas of high humidity and dust concentrations should be avoided.
- The edge of ceiling mounted detectors should be no closer than 4 inches (10 cm) from any wall.
- Place the top edge of wall mounted detectors between 4 and 12 inches (10 to 30 cm) from the ceiling.

## **Personal Identification Numbers**

### General Information

When programing Personal Identification Numbers, it is helpful to know the following terms:

- PIN: Personal Identification Number. This is the 4 or 6 digit code users enter at the keypad to gain access to the system. A PIN may be assigned to each User Number 001 - 015.
- Partition (Area): This is the area the User has authority in. You may select Partition (Area) 1, 2 or both.
- **User Number:** This is the number that identifies each person using the system. There are 15 possible User Numbers (001 015).
- **Authority Level:** This number determines which functions each user will be able to perform (see page 27).

Your system has the capacity to assign up to 15 PINs. The length of the PINs will be fixed at 4 or 6 digits. You cannot have both 4 and 6 digit PINs in the same system. If you wish to change the PIN length, it will be necessary to have your installing company make the change. If

changed, all new PINs will need to be assigned. Each User number may have only one PIN assigned to it. Attempting to assign the same PIN to multiple User Numbers will result in a 3 beep entry error tone, and the entry will not be made.

User Number 001 is designated as a Master Code. It can be used to add, delete or change other PINs.

User Number 001 is shipped from the factory with the sequence of 123456. This code should be changed to one of your personal preference, and must be programmed as a Master Code. PINs should never be programmed with common sequences such as 1111 or 2468 because they are easily violated.

### Removing a PIN

To remove a PIN: enter a [Master Code] [#] [0] [0], the User Number of the PIN to be canceled, and then [#] again.

User Number 001 can not be canceled in this manner.

## Personal Identification Numbers (continued)

### PIN Authority Levels

- 0 = Master: Can enter all commands, add or change PINs, change time and date, bypass, arm, set autoarm, disarm, perform system tests, system reset, and view history. PIN 001 must be a master code and must have authority 0. Any or all PINs may be master codes.
- **1 = Unlimited:** Can enter all commands, bypass, arm, disarm, system reset, and perform system tests. Can not change PINs.
- 2 = General: Can bypass, arm and disarm. Can not change PINs, system reset, or enter the [#] [7] or [#] [8] functions.
- **3 = Arm Only:** Can arm the system with [#] [On] arming only. Can not perform any other functions including disarming.

4 = Temporary: Valid only for a limited time. Can arm and disarm the system, but can not perform any other functions. This code will automatically be deleted after 15 days if you have not already done so.



The 15 day clock is reset to 15 days each time a Temporary PIN is assigned. All Temporary PINs expire at the same time.

IMPORTANT

- **5 = Duress:** When the system is disarmed using a duress code, a silent report is sent to the central station. Duress codes are intended to be used when the user is forced to disarm the system.
- **6 = Access:** When a PIN with Access Code authority is entered, any output programmed for Access Output (e.g. door strikes) will pulse on for 10 seconds (works when the system is armed or disarmed).

## **Personal Identification Numbers (continued)**

# This chart will guide you through the steps necessary to change a PIN.

You should write down your entries before you enter the Master Code Programming Mode and have them with you as you begin programming. Make your entries promptly. If a long delay occurs in your entries, the 3-beep error tone occurs and exits you from the programming mode.

Steps to Change a PIN	Command Sequence	If Accepted, DS7447 Display Reads
# 1. Enter the Master Code Programming Mode.	[Master Code] + [#] [0]	"0 User Change" (display will scroll to this)
# 2. Enter a 0.	[0]	"Enter User No." (0010XX)
#3. Enter the User Number.	[0] [0] [1] through [0] [1] [5]	"Enter Authority Level" Level (0-6)
#4. Enter the Authority Level.	[0] through [6]	"Enter PIN"
#5. Enter the PIN.	Any 4 digits. Do not press [#].	"Enter PIN Again. End with #"
#6. Enter the PIN again followed by the [#] key.  PIN (same 4 digits as above), the [#].	PIN (same 4 digits as above), then [#].	A long beep will sound to signify acceptance of the new PIN.

### **Error Displays**

This chart explains the procedure for reading Error messages when the green Power Light is flashing.

Error messages may only be read when the control is disarmed. Contact your installing company if the problems persist. Control panel problems are indicated by a flashing green Power Light and the DS7447 display reading "Control Trouble, Enter #87."

- "AC Power Failure"\* or LED #1 on steady\*\*: There is a power failure and the control panel is running on backup battery.
- "Battery Trouble"\* or LED #2 on steady\*\*: If the system has just been through a power failure, wait at least two hours for the battery

7

to recharge, then enter a PIN + [System Reset] to perform a battery

- "Communicator Err"\* or LED #3 on steady\*\*: The communicator failed to communicate with the central station.
- "System Fault"\* or LED #4 on steady\*\*: Internal error in the control panel's circuitry or optional circuitry. These faults are designated as follows:

[#] [8] [7] will display	[#] [8] [9] will display
RAM Fault	System Fault 01
ROM Fault	System Fault 02
EEPROM Fault	System Fault 03
TRBL Zone Fault	System Fault 05

 "Keypad Fault" or LED #5 on steady\*\*: One of the keypads is not responding to the control panel.

- "Aux Power Fault"\* or LED #8 on steady\*\*: The Auxiliary power has been shorted.
- "Zone Trouble"\* or LED #6 on steady\*\*: One or more of the zones is not responding to the control panel. This may also display during power-up (if so, ignore).

Clear the Eu Caution: Clea only on the advi company or if y problem has	Read the Error green Power	Action
Clear the Error Display**** Caution: Clear the error display only on the advice of your installing company or if you are certain the problem has been remedied.	Read the Error Display when the green Power Light is flashing	Action Desired
PIN + [System Reset]	PIN + [#] [8] [7]	Command Sequence***

<sup>\* =</sup> the DS7447 display

These displays will not self clear.

<sup>\*\* =</sup> the DS7443S and DS7445 displays

<sup>\*\*\* =</sup> If in "Residential Mode", a PIN is not required for these commands.

<sup>\*\*\*\* =</sup> Battery Trouble and Communicator Err displays must be cleared by the [System Reset] command sequence even after the problem has been remedied.

All the other error displays will self clear from the keypads once the problem has been remedied.

### **Testing Your System**

## This chart explains the procedure for performing a Zone Test.

It is recommended that the system be tested weekly.

The Zone Test is used to confirm that detectors will report alarms to the keypad.

A Zone Test works on all zones, except 24-hour zones and fire zones.

While the keypad is in a Zone Test, no control panel alarms will activate an alarm, except 24-hour zone alarms and fire alarms; these will override the Zone Test function.

Zone Test	Typ Te
Test	Type of Test
PIN + [#] [8] [1]	Command Sequence*
"Test Zone" will display on the DS7447 followed by the zone number of any zones that have not been tested.  The DS7443S and DS7445 keypads will flash the zone LEDs of any untested zones. The DS7443S cannot display zones 7 & 8.  "Now Testing" will display on the DS7447 followed by the zone number of the zone that is currently being violated (tested). It returns to "Test Zone" after the violation.  The DS7443S and DS7445 will turn the zone LED on steady for the zone that is currently being violated (tested). The DS7443S cannot display zones 7 & 8.	What will Happen
Test each detector one at a time as instructed by the installing company.  To exit the Zone Test mode, enter your PIN followed by the [#] key.	What to Do

<sup>\* =</sup> If in "Residential Mode", a PIN is not required for this command.

## Testing Your System (continued)

This chart explains the procedure for performing a Battery Test.

automatically recharges the battery when power is restored If a power failure occurs, your control panel has a built-in battery that will continue to power the control panel for many hours. The control panel

In addition to an automatic battery test performed every 2 minutes, the battery may also be tested manually,

will occur (see Error Displays).

This test also uses the battery to manually activate all the system sounders for 2 seconds (#85 only). If the battery voltage is low, a battery fault

Sounder Test Type of Test Battery/ **Battery** Loca Test PIN + [System Reset] PIN + [#] [8] [5] Sequence? Command The control panel will report a Low Battery or a Low Battery Restoral if The keypad sounder and all alarm The control panel will perform a All keypad Lights will turn on. sounding devices will operate for 2 Battery Test. seconds. necessary. What will Happen battery to recharge and then try off recently, wait 2 hours for the If power in your building has been Error Displays. indicate a control problem. See If test fails, the control panel will What to Do

<sup>\* =</sup> If in "Residential Mode", a PIN is not required for these commands

## **Testing Your System (continued)**

# This chart explains the procedure for performing a Communicator Test.

This test is available only if your system transmits alarms and system information to a monitoring service, and has been programmed by the security installing company to permit communicator tests.

A long beep will initially sound to acknowledge the start of the test.

If the test is successful, the sounder will again issue one long beep.

If the test fails, the keypad sounder will turn ON continuously. To silence the sounder, enter you PIN followed by the [#] key or press the [\*] key.

Communicator Test	Type of Test
PIN + [#] [8] [2]	Command Sequence**
<ul><li>A long beep will sound.</li><li>A "Test" report is sent to the monitoring service.</li></ul>	What will Happen
If test fails, the keypad sounder will sound continuously. To silence the sounder, enter your PIN followed by the [#] key or the [*] key.  Note: This test may take several minutes to complete because the control panel will try 10 attempts before it fails this test.	What to Do

<sup>\*\* =</sup> If in "Residential Mode", a PIN is not required for this command.

## Event History Readback

This chart explains the procedure for performing an Event History Readback.

will be retained even in the event of a power loss. The DS7447 can display all of these events. The History Buffer stores the last 100 events in memory. The most recent 10 events are stored in non-volitile memory and

The DS7443S and DS7445 keypads will only display those zones that have alarmed. The DS7443S cannot display zones 7 & 8.

	-		
To exit from the Event Histon Mode, press the [*] key.	LEDs will flash for any zones that have alarmed. The DS7443S keypads cannot display zones 7 & 8.		
For the DS7447 keypad, scroll through the events by using the [9], [6], and [#] keys. See below	The last event to take place will be displayed on the DS7447 keypad.  PIN + [#] [8] [9] For the DS7443S and DS7445 keypads, the zone	PIN + [#] [8] [9]	Event History Readback
		o da	
What to Do	What will Happen	Command Sequence**	Type of Test

<sup>\*\* =</sup> If in "Residential Mode", a PIN is not required for this command.

## DS7447 Only: Scrolling through the History Events.

To begin scrolling back through the events, press the [#] key. The [#] key will scroll you back through the history line by line. The [9] key will scroll you back in reverse chronological order by event. A [6] will scroll you back up through the events (toward the most recent) by event.

the event or the change being made. Each event consists of two lines or display screens. The first line/screen will be the event title and user. The second line/screen will be the date of

To exit the Event History Mode, press the [\*] key or wait 20 seconds and the keypad will exit automatically.

#### Glossary

### Access Control PIN

An Access Control PIN is a special code used to activate electric door locks or other mechanisms connected to the control panel that

require this code to turn them on or off.

#### Armed/Disarmed

Arming the system (burglar zones) means to turn it on. Disarming the system means to turn it off. Remember, fire protection (if installed) is always Armed/on.

### Central Station/Monitoring Service

A Central Station/Monitoring Service is a facility used to continuously monitor phone signals from your system. Trained personnel there dispatch proper authorities as necessary.

#### Custom Arming

Custom Arming is a type of arming that uses the [#] [4] sequence. It is only a valid sequence if programmed by the installing company. It is a specific type of arming designed for your individual installation needs. Ask your installing company to explain Custom Arming further.

### Disarming Command Sequence

The Disarming Command Sequence is the sequence of keys you press at the keypad to disarm the system and/or silence alarms. It

consists of your PIN followed by the command [Off] button.

#### **Entry Delay**

An Entry Delay is a predetermined amount of time that allows entry into an armed area.

#### xit belay

An Exit Delay is a predetermined amount of time that allows you to exit an area just after you have armed it.

#### Faulted Zone

A Faulted Zone is a zone that is not ready to arm (e.g. an open door or window). It may also be described as being violated.

#### Force Arming

Force Arming is a way of arming the system by bypassing zones that are not ready to arm. This reduces the level of security and should be avoided.

#### Installing Company

The Installing Company is the company that physically installed the system. It may or may not be the same company who monitors the system

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#### Local System

A Local System is a system that has a control panel that is **not** programmed to call a monitoring service. It will sound only local (on sight) bells or sirens when an intrusion or fire alarm is detected.

#### Monitored System

A Monitored System is a system that uses phone lines to notify a monitoring service of programmed abnormal events such as burglar or fire alarms.

#### Zone

A Zone is an input to the control panel. There are eight hard-wired zones on the control panel. A zone is usually some type of detection device whether it be designed for burglar or fire

#### Zone Bypassing

Zone Bypassing is a way of arming the system by deliberately eliminating zones to be armed.

#### Zone Function

A Zone Function is the description of how a zone behaves in the system. Zone Functions usually define how a zone will respond when armed or when it detects an alarm.

## **Quick Reference Guide**

This system should be tested weekly to ensure it is functioning properly. If problems are detected in testing or changes are noticed in normal operation, call your installing company for service. The manufacturer recommends replacing the system battery every 3 to 5 years.

	Zone 8
	Zone 7
	Zone 6
	Zone 5
	Zone 4
	Zone 3
	Zone 2
	Zone 1
Protection	
	Installing Company Phone Number:
	Monitoring Service System Number.
	Monitoring Service Phone Number

## System Features Reference Guide

Quick Norma	Perim	[#] + [	[#] + [	[#] + [ 	#] + [ 
Quick Arming Your System	Normal Arming: [#] + [On]	Normal Arming: [#] + [On]  Perimeter Arming, no entry delay: [#] + [No Entry] + [Perimeter Only]	Normal Arming: [#] + [On]  Perimeter Arming, no entry delay: [#] + [No Entry] + [Perimeter Only]  Perimeter Arming, with entry delay:	Normal Arming: [#] + [On]  Perimeter Arming, no entry delay: [#] + [No Entry] + [Perimeter Only]  Perimeter Arming, with entry delay: [#] + [Perimeter Only]	Normal Arming: [#] + [On]  Perimeter Arming, no entry delay: [#] + [No Entry] + [Perimeter Only]  Perimeter Arming, with entry delay: [#] + [Perimeter Only]  Maximum Security Arming: [#] + [No Entry] + [On]

# System Features Reference Guide (continued)

Chime Mode PIN + [#] [7]

Zone Test PIN + [#] [8] [1]

Read Event History PIN + [#] [8] [9]

Battery Test PIN + [System Reset]

Communicator Test PIN + [#] [8] [2]

Fire Reset PIN + [System Reset]

Fire Trouble
PIN + [Off] to silence, PIN + [System Reset] to clear

Remote Program Dial-out PIN + [#] [8] [3]

Remote Program Answer PIN + [#] [8] [6]

Local Battery/Sounder Test PIN + [#] [8] [5]

Error Display PIN + [#] [8] [7]

Error Display Reset PIN + [System Reset]

Clear Zone Bypass
PIN + [Bypass] [\*] to clear

Access Control PIN + [Off]

Set Delayed Arming PIN + [#] [99]

Delay Auto Arm by 30 Minutes PIN + [OFF]

Select Partition 1 only PIN + [#] [#]

Select Partition 2 only PIN + [#] [#] [#] [#]

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